



CherryPicker® Application Platform

CAP-1000

Powerful. Reliable. Scalable.

MPEG-4 AVC Preprocessing

Performs grooming, splicing and processing-intensive statistical remultiplexing.

Exceptional Bandwidth

Up to 2 Gbps aggregate video stream throughput in a small 1RU chassis.

Carrier-Class Reliability

Redundant and hot swappable power supplies, hot swappable fan trays and field-replaceable input/output and processing modules.

Future-Proof

Programmable DSP architecture and 8 times the processing power of the DM6400 combine to meet evolving technical standards and emerging application needs over time through simple software upgrades.

10 Years of Innovation and Performance

Inherits over 80% of the software from the Emmy-award winning CherryPicker product line, which translates into interoperability and operational ease of use.

The Motorola CherryPicker Application Platform (CAP) is an advanced, IP-centric architecture designed to provide the power, scalability, and reliability required to build high-density digital video solutions for service providers.

The CAP-1000, a new member of the product line, gives video service providers unparalleled efficiency and flexibility in managing and localizing video streams.



The CAP-1000 provides a software application for rate shaping of real-time, broadcast-quality MPEG-4/AVC and MPEG-2 SD and HD streams. It enables additional applications, such as grooming, dejittering, and seamless localized ad insertion, and has the performance needed to support mission-critical initiatives like Switched Digital Video, VOD Playlist Advertising, IPTV, and Bulk Encryption.

The CAP-1000 provides a highly-programmable device that can support evolving technical standards and emerging application needs through simple software upgrades, allowing customers to realize continuous returns on their initial capital investment.

The CAP-1000's operations-friendly design ensures the high availability needed for high stream counts with redundant and hot-swappable power supplies, hot-swappable fan trays, with 1:1 and N:1 redundancy, and field-replaceable input/output cards and processing modules, all in a space – and power-saving 1RU (rack unit) enclosure.

SPECIFICATION SHEET

CherryPicker® Application Platform

Extensive Interoperability

- » MPEG-4/AVC and MPEG-2
- » SPTS and MPTS
- » ASI and Ethernet I/O
- » Unicast and Multicast ARP, ICMP, IGMPv3 over UDP / IP / RTP
- » QoS and VLAN tagging IEEE 802.1p, 802.1q

Seamless Program Splicing and Switching

- » High reliability HD and SD Digital ad insertion
- » SCTE 35 and 30 standards

Comprehensive Re-Multiplexing

- » PID filtering and remapping
- » PCR de-jittering and re-stamping
- » PAT and PMT computation band insertion
- » Data insertion
- » Advanced dynamic SI and PSI processing
- » Synchronization of data and video

Advanced Processing

- » CBR to VBR conversion
- » VBR to CBR conversion (Rate clamped VBR)
- » Bit rate conversion CBR to CBR, VBR to VBR
- » SD/HD rate shaping
- » Grooming and Re-Grooming

Flexible Management and Monitoring

- » Advanced Program analysis and bit rate measurements
- » Access through all GbE ports
- » XML configuration
- » SNMP Traps and status
- » HTTP web browser configuring
- » Local and remote logs
- » Full Java-based GUI

The CAP-1000 operates in converging IP networks with carrier-class reliability, and features massive processing power to handle up to 2Gbps of aggregate video stream throughput.

To maximize flexibility, Motorola has abstracted the hardware elements of the CAP-1000 from the software layer, enabling delivery of features such as session-based encryption, digital watermarking, Forward Error Correction (FEC), motion graphics overlay, and video scaling via future software releases.

VIDEO

MPEG-4/AVC Main and High Profile, up to Level 4
MPEG-2, MP@ML, MP@HL

- » HD 1080i x 1920/1440, 30 fps
- » HD 720p x 1280, 60 fps
- » NTSC 480i x 704/544/528/480/352, 29.97 fps
- » PAL 576i x 704/720/544/480/352, 25 fps

AUDIO

Dolby AC-3
MPEG-2 Layer I and II
AAC

INPUT/OUTPUT PORTS

Ethernet

- » (4) copper RJ-45 1000Base-T
- » (4) optical LC SFP connectors 1000Base-SX/LX
- » Supports single-mode and multi-mode optical transceivers

DVB-ASI

- » (4) or (8) BNC connectors
- » Each port is programmable as input, primary output, or mirroring output

CONTROL/CONSOLE

Web-based GUI
SNMP support
GPIO with Micro-D 15-pin male connector, 2 inputs, 2 outputs
56 kbps V.92 modem with RJ-11 port
4PAC serial console maintenance port
RJ-45 GbE debug port for initial IP configuration

ELECTRICAL/MECHANICAL

Form Factor	1RU (1.75in); 19in rack mountable 23.5" L x 17.5"W x 1.75" H (excluding rack ears and connectors)
Weight	31 lb
Input Voltage	100 to 240 VAC
Power Consumption	3.5 VAC, 120 V, 60 Hz; 350 W max.
Frequency	50 to 60 Hz
Operating Temperature	0 °C to +50 °C
Cooling	Side-to-side
Humidity	5% to 95%, non-condensing
Certification	UL, CB, CE, VCCI, TUV, FCC, CISPR 22 Class A, ROHS
NEBS	Level 1-ready

All features, functionality, and other product specifications are subject to change without notice or obligation.



MOTOROLA

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